

# Product datasheet

Specifications



orange pilot light head Ø22 with  
grooved lens for integral LED

Local distributor code: 386311015 ZB4BV053S

## Main

Range of product	Harmony XB4
Product or component type	Head for pilot light
Product compatibility	Integral LED
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	22 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Cap/Operator or lens colour	Orange
Operator additional information	With grooved lens
Environmental characteristic	High ambient lighting environment

## Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	30 mm
Net weight	0.026 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Electrical composition code	P1 in front mounting with integral LED P2 in front mounting with integral LED and transformer
Device presentation	Basic element

## Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °C
Overvoltage category	Class I conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529

IP67  
IP69  
IP69K

<b>NEMA degree of protection</b>	NEMA 13 NEMA 4X
<b>IK degree of protection</b>	IK06 conforming to IEC 50102
<b>Standards</b>	EN/IEC 60947-5-1 CSA C22.2 No 14 JIS C8201-5-1 EN/IEC 60947-5-5 EN/IEC 60947-1 EN/IEC 60947-5-4 UL 508 JIS C8201-1
<b>Vibration resistance</b>	5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	26.0 g
<b>Package 1 Height</b>	2.8 cm
<b>Package 1 width</b>	3.8 cm
<b>Package 1 Length</b>	4.8 cm
<b>Unit Type of Package 2</b>	BB1
<b>Number of Units in Package 2</b>	5
<b>Package 2 Weight</b>	136.0 g
<b>Package 2 Height</b>	4.4 cm
<b>Package 2 width</b>	3.4 cm
<b>Package 2 Length</b>	26.5 cm
<b>Unit Type of Package 3</b>	S02
<b>Number of Units in Package 3</b>	50
<b>Package 3 Weight</b>	1.703 kg
<b>Package 3 Height</b>	15 cm
<b>Package 3 width</b>	30 cm
<b>Package 3 Length</b>	40 cm

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACh Regulation</b>	<a href="#">REACh Declaration</a>
<b>REACh free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>

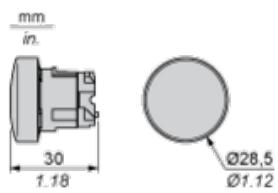
## Contractual warranty

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Warranty	18 months
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Dimensions

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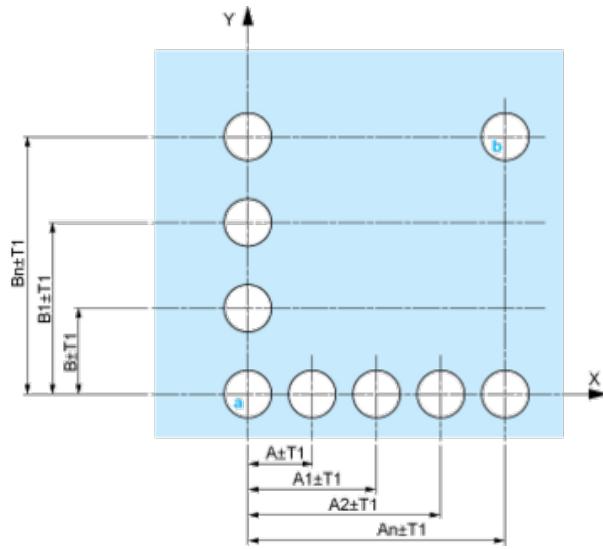


**Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
 <p>(1) Diameter on finished panel or support (2) 40 mm min. / 1.57 in. min. (3) 30 mm min. / 1.18 in. min. (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm <math>^{+0.4}</math> / 0.88 in. <math>^{+0.016}</math>) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.</p>	 <p>(1) Diameter on finished panel or support (2) 40 mm min. / 1.57 in. min. (3) 30 mm min. / 1.18 in. min. (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm <math>^{+0.4}</math> / 0.88 in. <math>^{+0.016}</math>) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.</p>

## Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

### Panel Cut-outs (Viewed from Installer's Side)

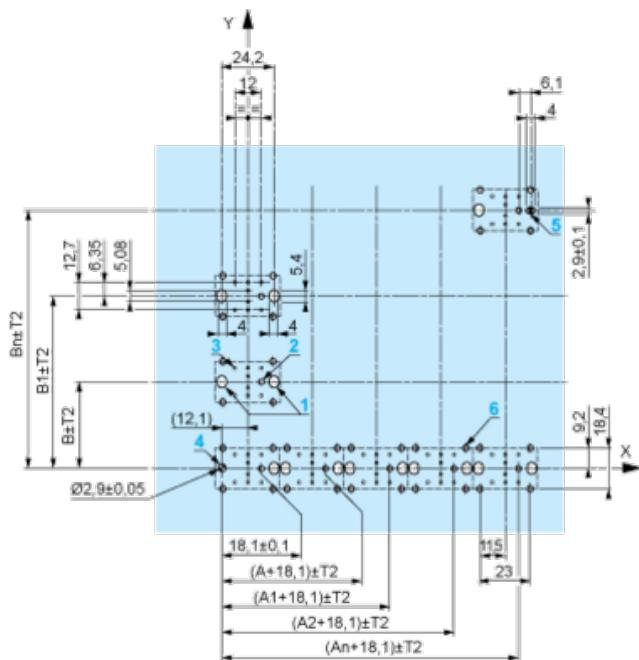


**A:** 30 mm min. / 1.18 in. min.

**B:** 40 mm min. / 1.57 in. min.

### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

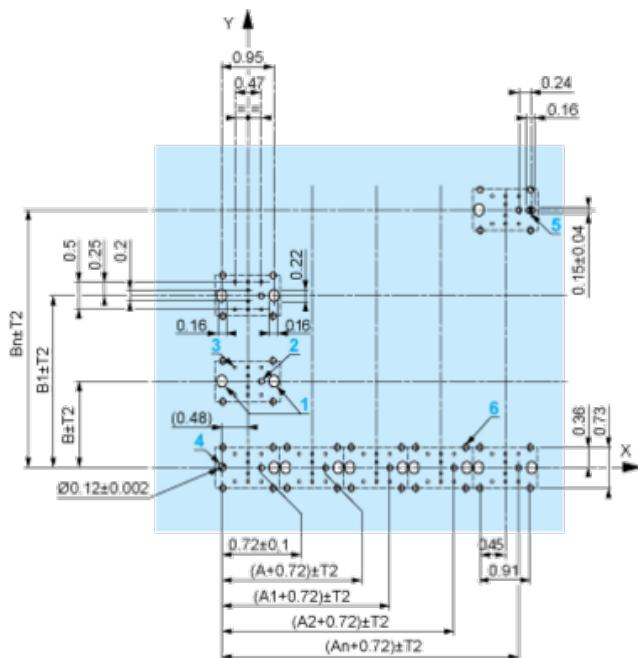
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



**A:** 1.18 in. min.

**B:** 1.57 in. min.

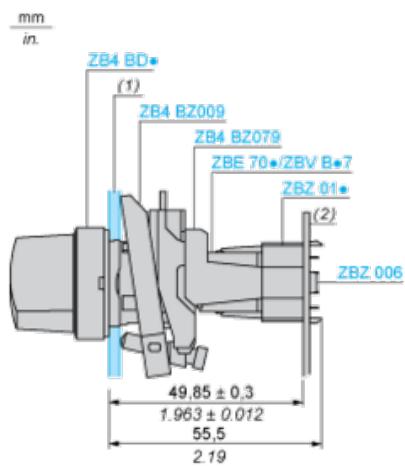
### General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in:  $T_1 + T_2 = 0.3$  mm max.

### Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter:  $22.4 \text{ mm} \pm 0.1$  /  $0.88 \text{ in.} \pm 0.004$
- Orientation of body/fixing collar ZB4 BZ009:  $\pm 2^\circ 30'$  (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 fixing collar/pillar and its fixing screws:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - with each selector switch head (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.



(1) Panel

(2) Printed circuit board

### Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole  $\varnothing 2.4 \text{ mm} \pm 0.05$  /  $0.09 \text{ in.} \pm 0.002$  for centring adapter ZBZ 01•
- 3 8 ×  $\varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$  holes
- 4 1 hole  $\varnothing 2.9 \text{ mm} \pm 0.05$  /  $0.11 \text{ in.} \pm 0.002$ , for aligning the printed circuit board (with cut-out marked **a**)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked **b**)
- 6 4 holes  $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$  for clipping in adapter ZBZ 01•

Dimensions  $A_n + 18.1$  relate to the  $\varnothing 2.4 \text{ mm} \pm 0.05$  /  $0.09 \text{ in.} \pm 0.002$  holes for centring adapter ZBZ 01•.

### Electrical Composition Corresponding to Codes P1, P3, PF1, PR1 and PF2

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Light block



**Electrical Composition Corresponding to Codes M6 and P2**

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### Legend

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Single contact



Double contact



Light block



Possible location

